

## Region 1 FY 2013 Invasive Species Control Program Proposal

**Refuge/complex name:** Ridgefield National Wildlife Refuge

**Project title:** Invasive Plant Species Focused Eradication

**Total amount requested:** \$18,000

**Project description:** The proposed project is a part of the Ridgefield NWR invasive species management program, and will help achieve goals and priority habitats identified in the Refuge CCP. This project would provide funding for an amphibious all-terrain vehicle that would be used to access populations of shiny geranium (a Class A Washington species) and fragrant water lily. The project will survey approximately 250 acres as part of our Early Detection/Rapid Response (ED/RR) efforts. The project will focus treatment on eradicating these 2 key species which have the greatest potential for eradication as well as any occurrences of purple loosestrife and yellow flag iris that are encountered during surveys. Additional secondary species will be treated as resources permit within focal efforts. Shiny geranium will be treated over 2 acres - discovered by ED/RR in 2012 and isolated to one island. Fragrant water lily occurs in only one floodplain pond, has been reduced by 80% to date, and will be treated over 10 acres.

**Distinct project with well-defined objectives (10 points):** Ridgefield NWR has an on-going annual invasive plant control program. However our ability to access portions of the Refuge has been reduced by elimination of an access road through the Port of Ridgefield. Acquisition of an amphibious all-terrain vehicle would permit staff, contractors, and volunteers to access portions of the Refuge's Carty Unit during critical control periods.

Both species' occurrences have been thoroughly mapped in 2012 and the Refuge has sufficient manpower and herbicide to treat the occurrences. Given available resources and with the requested equipment, the Refuge should be able to achieve control of the existing occurrences in a 2-year period, while continuing ED/ER efforts to quickly identify and treat any new occurrences that may result from propagules entering the Refuge through floodwaters or other sources.

Comment [BFW1]: THIS I like.

**Potential for maximum control (10 points):** The Refuge's aggressive invasive plant control program has demonstrated success in eliminating existing stands of purple loosestrife and reducing the areal extent of fragrant water lily by >80%. By identifying and mapping the occurrences of shiny geranium in 2012, it is reasonable to expect control of the species in 2 years with extended monitoring to ensure that new occurrences do not become established.

**Biological benefit to priority species or BIDEH (10 points):** The Ridgefield NWR was established to benefit migratory waterfowl and other trust resources (inter-jurisdictional fish, listed species, and migratory birds). The proposed activities are spelled out in the Refuge's CCP. Removal of wetland and riparian invasive plants will prevent the suppression of native vegetation which provide high-quality forage and cover for wildlife species such as the Federally-listed Columbian white-tailed deer. Shiny geranium is a Class A weed recognized as an aggressive invader on drier sites and poses a direct threat to priority oak woodland and prairie remnant (grass bald) habitats on the Carty Unit, including areas lying within the special designation Blackwater Island Research Natural Area, which includes the highest quality Columbia white-tailed deer habitat on the Refuge.

**Utilizes the principles of Integrated Pest Management (5 points):** ED/RR will be implemented over 250 acres as an integral and lead component of this project to detect and prevent new occurrences. An IPM approach will be followed using mechanical, chemical, and cultural methods from local partners as researched and described in the Ridgefield Columbia Floodplain Weed Management Area Integrated Weed Management Plan 2012. Selective broadleaf herbicide will be used to allow grass species to recolonize treated areas, and in wetland settings, areas treated with non-selective herbicides will be allowed to recolonize from the existing on-site seed sources of preferred wetland plants. This response has been observed and photographed following recent treatments in Refuge wetlands. In most wetlands, only small areas will be disturbed and native vegetation should re-establish from seed bank propagules.

**Comment [BFW2]:** Wowser! Would like to see this.

**Monitoring to document and evaluate project success (5 points):** Permanent photomonitoring points will be established or repeated and GPS mapping and data entry into the Refuge GIS will monitor control of locations Refuge-wide. Annual ED/ER efforts will continue in the treated areas and adjacent habitats to ensure that any individual plants that are located are removed before the species becomes established.

**Involves matching funds (not required) or in-kind support from partners (5 points):** The Ridgefield NWR is a partner in the Ridgefield Columbia River Cooperative Weed Management Area coordinated by the Friends of RNWR. We have sufficient spray tanks and herbicide applicators to conduct the proposed work. Other partners are Plasnewydd Farms, Bachelor Island Conservation Farms, Clark County Vegetation Management, Washington Dept. of Fish and Wildlife, Washington Dept. of Natural Resources, City of Ridgefield, and community volunteers. Community volunteers will contribute in-kind labor. Matching contributions are listed in the budget below.

**Budget:** The Complex's invasive plant management program relies heavily on volunteers, Friends groups, and grant funds. The funding requested is critical to allow access to the survey and treatment sites during critical control periods and to maintain the biological integrity of the Refuge's Carty Unit. Funds will be obligated in FY13.

Argo 700 HD with windshield and ROPS (GSA contract)	\$17,000.00
shipping	\$1,000.00
<b>Total Amount Requested:</b>	<b>\$18,000.00</b>
Other Contributions:	
Community Volunteers in-kind labor estimated 120 hours	\$2,400.00
Discretionary Refuge funds or R1 Invasives with Vols 2013 grant	\$1,500.00
Supplies: (herbicide, fuel, volunteer supplies, applicator training, etc.)	\$1,000.00